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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT

PAPER NUMBER

1756

DATE MAILED: 07/14/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,481

Applicant(s)

ALMOG, YAACOV

Examiner

Christopher D RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

In the last Office action the Examiner objected to the amendment to specification page 1 because there was no indication where the replacement should be made. Applicants state in the recent response that the amendment is proper because there is only one paragraph on page 1. The placement for the amendment is self-evident.

The Examiner has carefully reviewed the specification and notes that the first page of the instant specification is numbered as page 2. This page starts with the title of the invention as would be expected for the first page of the application per 37 CFR 1.72(a). The title is followed by the Background of the Invention as specified by 37 CFR 1.77. It appears that a page containing the priority claim was presented before the title, which is improper (37 CFR 1.77 & MPEP 608.01(a)). The current file indicates that a page "1" was never received by the Office. This missing page prompted the statement concerning priority on page 2 of the first Office action (paper #4). Applicants have not previously stated that a priority claim was present on a page before the title page.

It is apparent that a page is missing from the specification (i.e., page 1). In response to this Office action applicants are required to do one of the following in response to this Office action (MPEP 601.01(d)):

- (A) accept the application, as filed, without all of the page(s) of the specification;
- (B) file any omitted page(s) with an oath or declaration in compliance with 37 CFR 1.63 and 37 CFR 1.64 referring to the omitted page(s) and a petition under 37 CFR 1.182 with the petition fee set forth in 37 CFR 1.17(h), requesting the date of submission of the omitted page(s) as the application filing date; or
- (C) file a petition under 37 CFR 1.53(e) with the petition fee set forth in 37 CFR 1.17(h) alleging that the page(s) indicated as omitted was in fact deposited with the USPTO with the application papers, including any and all evidence

Art Unit: 1756

supporting the allegation. See MPEP § 503. The petition fee will be refunded if it is determined that the page(s) was in fact received by the USPTO with the application papers deposited on filing.

If option (A) is chosen a new priority statement is required specifying where the amendment should be made to the specification. Presumably this would be present on page 2 per 37 CFR 1.77.

Priority

The priority claim remains objected to because the claim was not made during the time period set forth in 37 CFR 1.78(a)(2) or (a)(5). Applicants state in the recent response that the priority claim is supported by contemporaneous submission of an original filing receipt and a request for issuance of a corrected filing receipt. These documents were not submitted in the response and are not noted on the Certificate of Mailing. Lacking submission of these documents the objection must be maintained and a clear statement that the documents submitted are copies of the first filing receipt the objection must be maintained.

Claim Rejections - 35 USC § 112

Claims 32-46 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 32 continues to state that the method of producing the liquid toner requires the toners to have a given particle conductivity and that the coating of the polymer particles with the at least one ionomer provides the polymer particles with a chargeability sufficient to give said toner particles said given particle conductivity. Claim 33 states that the toner precursor particles

Art Unit: 1756

(understood to be pigmented polymer particles) are unchargeable or weakly chargeable by the charge director(s) to an extent that they are not useable in electrostatic latent images in a particular process. The rejection is extended to new claim 46 because this claim is substantially similar to claim 32 except that the "wherein" limitation specifies that the coating provides sufficient chargeability to impart the toner particles with particle conductivity to the extent that said particles can be used to develop a latent electrostatic image in the electrostatic imaging method. This claim is not described by the specification as filed for the same reasons as given for claim 32 but also because this claim appears to have sufficient charging for some electrostatic imaging methods but not for others. The comments given in the last Office action for claim 33 in the paragraph spanning pages 4 and 5 are pertinent to claim 46.

In the last Office action the Examiner stated that the scope of the claims' limitations did not have basis in the specification as filed. Claim 32 includes within its scope the situation where toner particles that do have sufficient charge in practical applications in electrostatic imaging either have their charge further increased, kept the same, or decreased by coating with the ionomer to meet the given particle conductivity required. Claim 33 appears to include the situation where the particles would have sufficient charge for some electrostatic imaging applications but not for others. Similar comments are pertinent to claim 46 as noted above. The dependent claims are similarly without basis in the specification as filed.

Applicants traverse these rejections with reliance on specific disclosures on pages 9, 10, and 12. These passages show situations where the toners have insufficient chargeability, but that the chargeability is enhanced by the use of the ionomer coating. Applicants take the position that these passages provide basis for the claims as presented because the artisan would understand that if the particle have higher levels of chargeability initially, the coated particles would also have higher levels of chargeability because of the coating.

Art Unit: 1756

The Examiner has carefully reviewed the specification disclosure but cannot agree with applicant's position. The specification does not provide any *written description* of the use of pigmented particles where these particles initially have sufficient charge for electrostatic imaging applications. The specification is explicit in its statement that the particles initially have no charge or insufficient charge (spec. p. 4, l. 13-23; p. 5, l. 30-36; p. 6, l. 32 – p. 7, l. 8; p. 8, l. 10-18). There is no disclosure of providing pigmented polymer particles having sufficient charge and then increasing the polarity of that charge, maintaining the same level of charge, or decreasing the charge. This embodiment is clearly included within the scope of the instant claims but is not described by the instant specification. There is no indication that the artisan would make the conclusions asserted by applicant and, at best, these would be inferences that are not supported by the specification. Applicants also have not specifically traversed the Examiner's position that the claim 33 includes the situation where the uncoated particles would have sufficient charge for some electrostatic imaging applications but not for others. Such an embodiment is not described by the specification as filed.

The rejection is proper and is maintained.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 32-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPA 176 630 in view of Whitbread in US Patent 3,325,409, all further in view of Handbook of Imaging Materials to Diamond, Metcalfe in US Patent 3,078,231, and Wagner in US Patent 3,438,904.

Art Unit: 1756

Claims 30-44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPA 176 630 in view of *Electrophotography* to Schaffert, pp. 69-73, all further in view of Handbook of Imaging Materials to Diamond, Metcalfe in US Patent 3,078,231, and Wagner in US Patent 3,438,904.

These rejections were set forth in the last Office action. The rejections are extended to claim 46 because of the reasons previously given for claim 32 and because the artisan would design the toner so that it could be used to develop an electrostatic latent image. The applied references (e.g., EP, Schaffert, Whitbread, etc.) are all concerned with the development of electrostatic latent images. Thus the artisan would produce the toner to have this characteristic with suitability chargeability.

Applicants summarize the Examiner's rejections on pages 5 through 7 of the response and repeat the limitations of claim 30 on pages 7 and 8. Applicants state that the number of references cited evidences the non-obviousness of the claimed invention (pages 8-9). In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). The references are cited to show the knowledge and level of skill that the skilled artisan would be expected to possess. Based on this knowledge and the teachings and suggestions presented therein the artisan would have found the claimed methods obvious. There is no limit on the number of references that can be combined to show teachings and concerns in the art, the knowledge of the artisan, or the skill level possessed. The traversal in the basis of the number of reference is not persuasive. No other specific remarks are seen as present for the rejection that combines with Schaffert so this rejection is maintained for this reason.

Art Unit: 1756

Applicants also traverse the rejection of the EP document and Whitbread with other supported references because the EP document does not disclose a pigmented polymer particle or the use of charge directors and because Whitbread does not disclose a liquid developer having an ionomer coating. These references are argued individually. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The supporting art was relied upon for teaching the pigmented polymer particles and motivating the artisan to use a pigmented polymer particle as the pigment in the EP document because Whitbread discloses the hydrogenated rosin/pigment mixture as providing high contrast images, which are scuff resistant when dried. The supporting art was also relied upon for its disclosure of charge directors as well known in the art to produce the desired charge on the toner particles and for motivating the use of adsorbed charge additives (Metcalf). The art motivates the combination rejection where the references are viewed in combination, as discussed in the rejections of record.

Applicant's other reason for traversal continues to be that the EP reference teaches a toner particle that is complete by itself and that none of the references disclose the structure claimed (i.e., a pigmented polymer particle with an ionomer coating) or the method of obtaining this structure by the steps recited (response p. 9).

In response the Examiner notes that Whitbread combines rosin and pigment to produce scuff resistant images when dried (col. 2, l. 21-25). The artisan seeking to obtain this advantage while controlling the charging to a specific degree such as taught by the EP reference would have ample motivation to combine the references to obtain the combination of scuff resistance

Art Unit: 1756

and controlled chargeability by the references. The art clearly indicates that the artisan would know that toner particles are usefully coated to obtain the desired charge for a specific application. As discussed in the prior Office actions, Metcalfe teaches that pigment particles do not necessarily have the necessary and required charge for a desired development process and thus charge control agents (i.e., compounds which adjust the charge of the pigment in the carrier liquid) are coated onto the pigment to give the requisite charge. The body of art is such that the artisan would recognize that the pigmented particles are known to provide certain advantages (e.g., Whitbread's high contrast, scuff resistant images or Schaffert's small particle size). The artisan would also recognize that the art teaches that coating the particle with an ionomer, as in the EP reference, can modify the charge of toner particles to a desired level or polarity. The EP reference pigment would not be expected to have the scuff resistance taught by Whitbread because this is a result of the combination of the rosin and pigment. Applicants have not specifically addressed this point in the recent response. Although the EP reference does produce a workable liquid toner by itself as noted by applicants, the artisan would clearly recognize that improvements could be made to the EP liquid toner's image by use of Whitbread's pigmented polymer particle. Further, a finer toner image would be expected by preparing the toner particle according to the method of Schaffert. The EP reference in combination with the other art suggests each of the claimed process steps for the reasons of record. The combined art would also give the structure required by the process.

Applicants note that the EP reference uses an anionic addition polymer, which is not disclosed by Whitbread. This polymer appears to be the ionomer in the reference. The fact that Whitbread does not disclose the ionomer does not negate the rejection because the EP reference does disclose the ionomer and the supporting art gives reasons for use of a pigmented polymer rather than a pigment itself as the toning material of the liquid developer.

Art Unit: 1756

The advantages discussed by applicants are suggested by the art, such as Whitbread. Further, the fact that applicant has recognized an advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Further the references need not recognize applicants' benefits to be properly combined. As long as the art provides sufficient reason to modify the primary reference from the pertinent art the combined references render obvious the claimed invention.

The references in combination suggest the claimed invention for the reasons given here and in the prior Office action. The rejection is applicable to the newly ^{submitted} ~~submitted~~ claim for the reasons of record. C/A

Double Patenting

Claims 30-46 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13 and 18-32 of U.S. Patent No. 6,337,168. Although the conflicting claims are not identical, they are not patentably distinct from each other because the specific methods presented in the instant claims include totally within their scope the narrower limitations of the patent claims. Because there is no specific reason for traversal the rejection is maintained. The prompt filing of a terminal disclaimer is suggested.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1756


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

cdr
July 10, 2003


CHRISTOPHER RODEE
PRIMARY EXAMINER